User Manaul_R1.1

1. Product Details

1.1 Product Name/Model

Name : TPMS 433 Sensor

Model : TR0001TV020201000

1.2 Product Features

Tire Pressure Monitoring Device

1. Tire pressure measurement: 0 to 116 PSI
2. Tire temperature measurement: -40 to 105 °C
3. Accuracy: ±1 psi, ±2°C
4. Communication: 433.92MHz
5. Battery Life: 5 years

1.3. Accessories

1. TR414 - Snap-In Pressure Valve
2. Pan Phillips Cross head M3 x 6
3. 433 Receiver

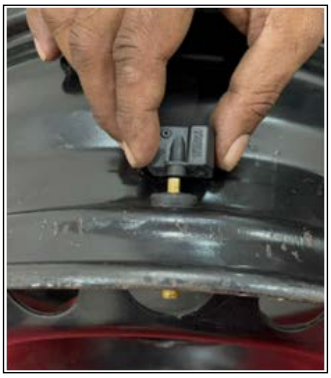
2. Installation Instructions

2.1. Sensor with pressure Valve

2.2. Installation Steps

- Using valve steam tool
- Pull the Rubber pressure valve stem through until seated

- Attached the sensor on valve as show in image



- Screw the sensor onto top of the pressure valve stem
- Then tighten the screw with Adequate Torque (1.3 to 1.4Nm)

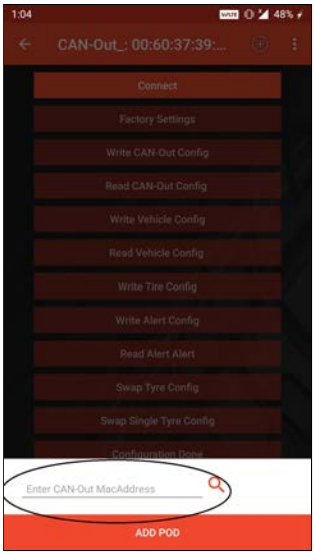

- Fitment completed

3. Configure to CAN Receiver

3.1. Connection with Mobile APP

Go to CAN Out receiver symbol.

Enter CAN Receiver MAC address.



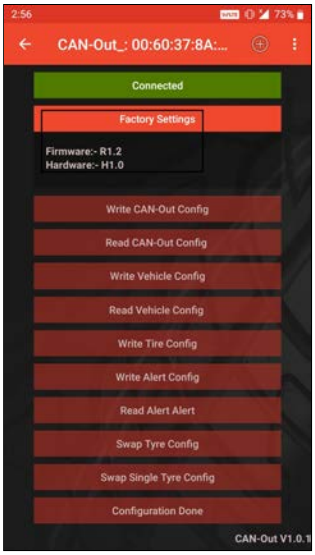
Press Connect option and wait for connection.

After Connecting show connected status with green colour.

Factory Settings :

After connected press option factory setting

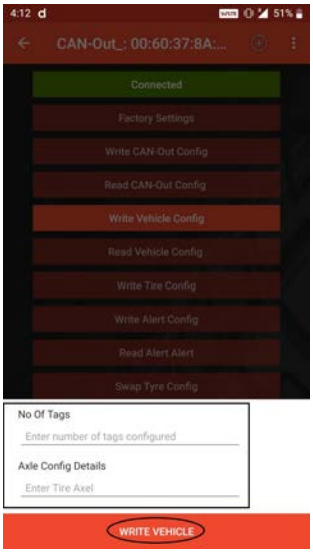
Check F/W and H/W version



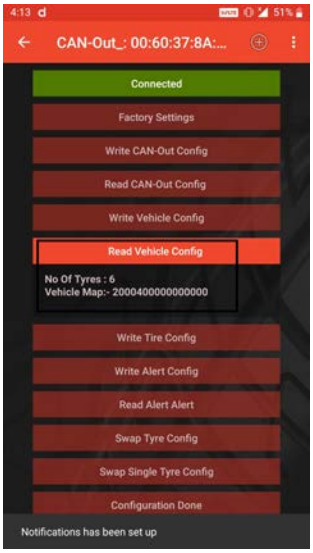
3.2. 433 Sensor configuration

Press write vehicle config option

Enter No.of tags and Tire map/Axle configure details



Press Read vehicle config to verify configuration

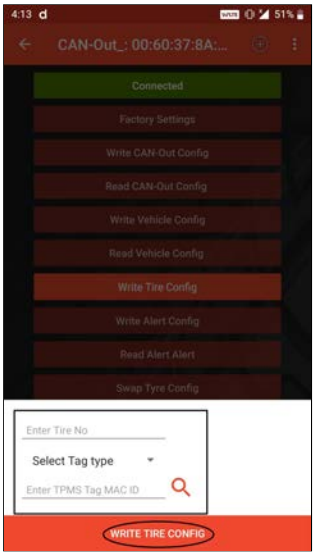


Press on the write Config option

Enter tire no and select type of tag

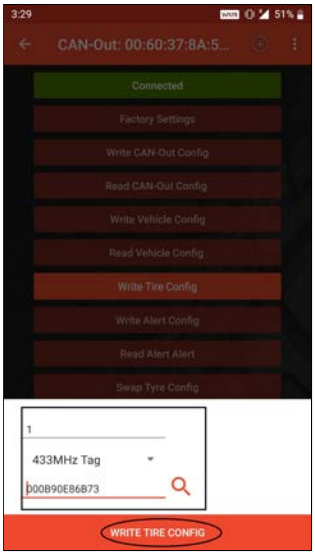
Scan MAC id or add MAC id manually.

Press write tire config and add enter MAC id .then once again press write config option repeat this process for entering MAC id.



Enter details of all 433 sensors as per no of Sensors added.

Here is one example of tag configuration.

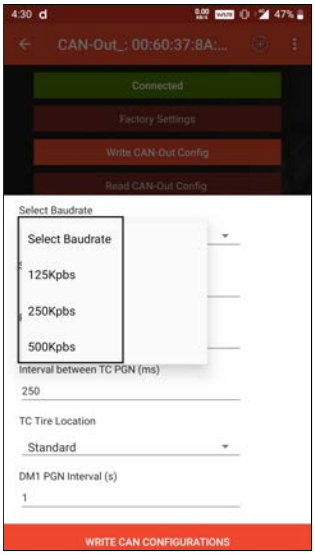


3.3. CAN Configuration

Press write CAN-Out config option

Change CAN tire position changing through standard and custom mode.

For changing baud rate



Press Read CAN-Out config option

Read carefully CAN configuration CAN communication depends

on it same baud rate is important for communication.

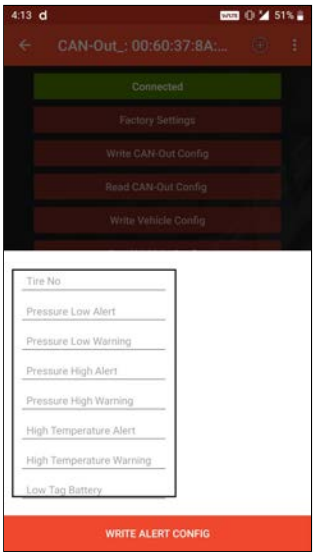
We can change all the parameters as per requirement.

3.4.Threshold set point configuration of Pressure, Temperature & Battery

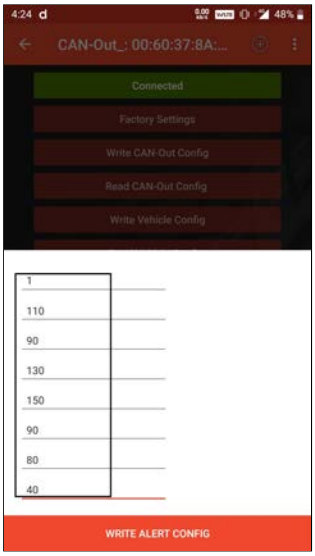
Press Write Alert config option

Enter here alert and warning set point for pressure,temp and battery .

Enter Tire no too.



Here is one example for how set alert and warnings.

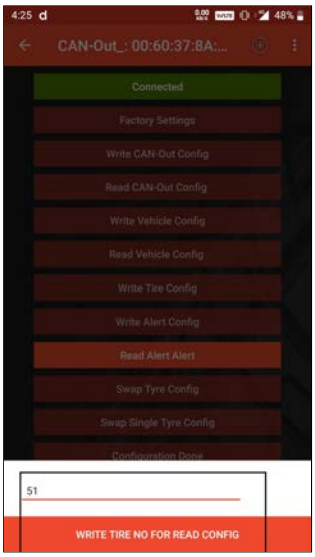


Read alert if we u want to check tire alert of tire 1

Here enter 51 to read tire 1 alert and warnings

same procedure followed to check another configured tire no./tag no,follow procedure to check another configured tag alert warning

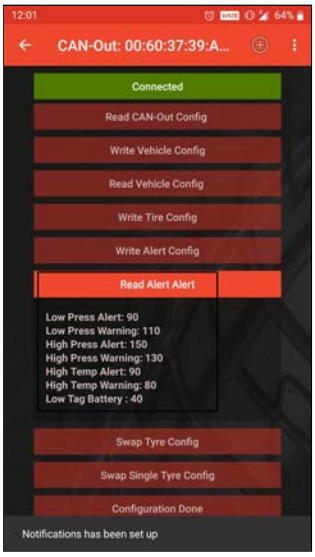
ex: 52 = tire 2 ,53= tire 3,....



Read alert alert ,Check configured setpoints of all tires

this is so important because event flag of threshold set point

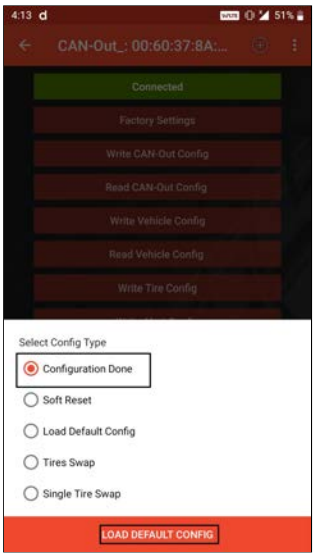
is depends on the set point values.



After any configuration done.

Press configuration done option

Select configuration done option then press Load Default Config



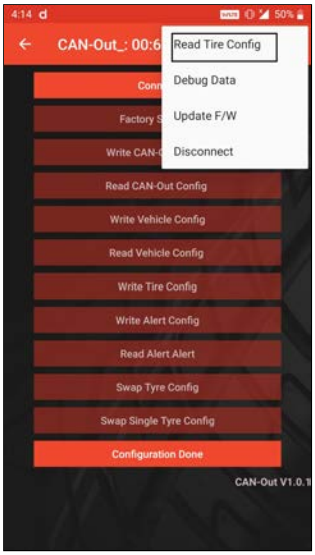
If u not done above process when any configuration done in

above procedure your configuration not finished and not accepted by the Receiver.

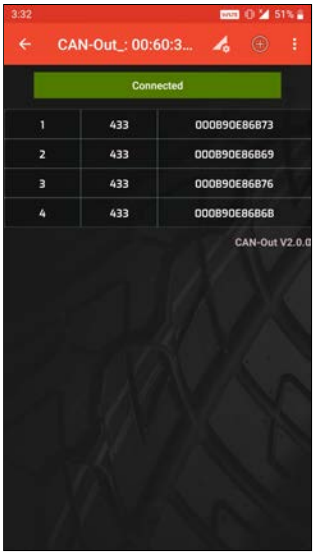
3.5. Read Tire config

Press on the three dots located in right corner \

Option list displayed choose Read Tire Config options.



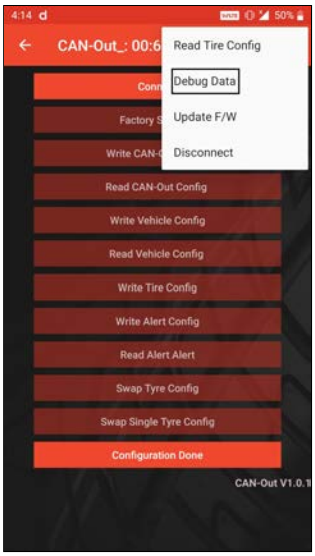
Check configured BLE tags MAC ID and position.



3.6.Read Debug Data

Press on the three dots located in right corner \

Option list displayed choose Debug data options.

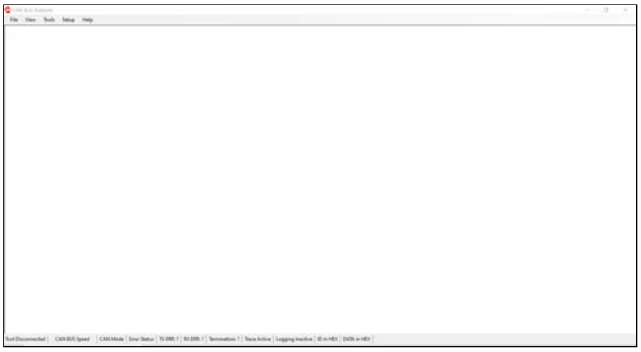


Check Debug data no tag ,tires configured

Check baud rate,source address ,F/W version and TC tire location.

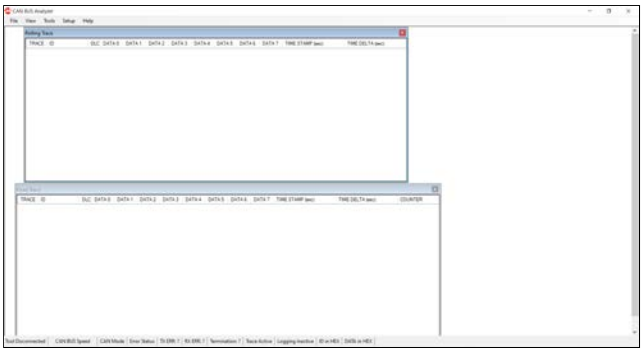
4. Sensor & Receiver Data Validation

1. **OPEN** : CAN Bus analyzer software

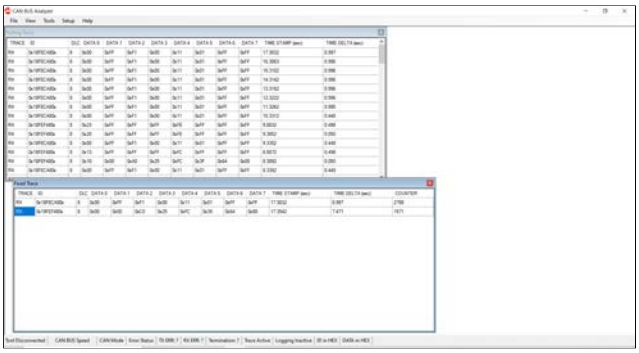


2. Select **set up** option from menu bar : Hardware Setup : CAN bitrate control (250Kbps)

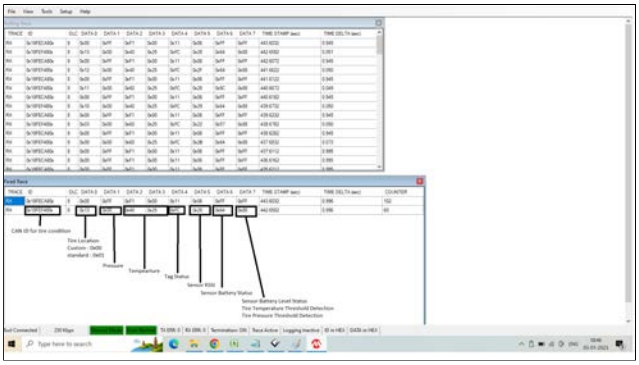
3.Select **Tools** option from menu bar : Rolling and Fixed trace



4. 433 sensor received data shown as below on CAN Bus Analyzer



5.To Read data on CAN Bus Analyzer refer below image.


Reference image.

7. Safety Warnings

This equipment is not suitable for use in locations
where children are likely to be present.
– replacement of a battery with an incorrect type that can defeat a safeguard
– disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion
– leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas; and
– a battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

8. Homologation Details

1. FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2. IC

ICES-003 Class B Notice - Avis NMB-003, Class B

This Class B digital apparatus complies with Canadian ICES-003.

3. UKCA

Hereby, "**Treel Mobility Solutions Pvt. Ltd.**" declares that the radio equipment type [TR0001TV020201000] is in compliance with UK Radio Equipment Regulation 2017.

The full text of the UK declaration of conformity is available at the following internet address: www.treel.in

4. CE

Hereby, "**Treel Mobility Solutions Pvt. Ltd**." declares that the radio equipment type [TR0001TV020201000] is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.treel.in

9. Contact Details

9.1. Manufactured By

TREEL Mobility Solutions Pvt. Ltd.
Laxmi Vishnupuram Amenities Business,
S. No. 6/1B,6/4,7/4, Plot No. 02 ,
NDA Road, Shivane,
Pune - 411023 (MH) INDIA
Email Support : support@treel.in
Toll Free Number : 18008330233
WhatsApp Support : 9112000142 / 9112000831

9.2. Importer Details

TBD

10. Revision History

Sr.No	Revision Date	Revision No	Revision Details
1	12/04/2023	R1.0	First release
2	24/05/2023	R1.1	Added Homologation details

FCC Regulatory Compliance

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

ISED Regulatory Compliance

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1)This device may not cause interference.(2)This device must accept any interference, including interference that may cause undesired operation of the device.
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :(1)L'appareil ne doit pas produire de brouillage; (2)L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

To maintain compliance with RSS's RF Exposure guidelines, this equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.
Pour rester conforme aux directives d'exposition aux radiofréquences de RSS, cet équipement doit être installé et utilisé à une distance minimale de 20cm du radiateur de votre corps : Utilisez uniquement l'antenne fournie.

RF Exposure Information (RED & UKCA)

To be protected against all verified adverse effects, the separation distance of at least 20cm must be maintained between the antenna of the radio having max. 0dBi antenna and all persons.
The maximum EIRP power is 3.77dBm(for EU/UKCA, 433.92MHz).